

Remarks

The Office Action dated August 10, 2009, indicated that the finality of the previous Office Action is withdrawn, and the following new grounds of rejection are presented: claims 1, 11-12 and 17 stand rejected under 35 U.S.C. § 103(a) over Belschner (U.S. Patent No. 7,103,805) in view of Vail (U.S. Patent No. 6,918,068); claims 3-10, 13, 15-16 and 18-20 stand rejected under 35 U.S.C. § 103(a) over the '805 and '068 references and further in view of Riley (U.S. Patent No. 5,706,289); and claims 2 and 14 stand rejected under 35 U.S.C. § 103(a) over the '805 and '068 references, and further in view of Baek (U.S. Patent No. 5,680,554). Applicant traverses all of the rejections and, unless explicitly stated by the Applicant, does not acquiesce to any objection, rejection or averment made in the Office Action. Moreover, as the instant Office Action has generally failed to address Applicant's traversals and has effectively repeated the erroneous assertions regarding the '805 reference, Applicant fully incorporates its traversals of record herein.

Applicant respectfully traverses the § 103(a) rejection of claims 1-20 because the cited '805 reference, either alone or in combination, lacks correspondence to the claimed invention. For example, none of the asserted references teaches the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.*, the claimed bus driver and its related functionality. For example, the '805 reference fails to teach a bus driver that receives and evaluates two independent release signals to control bus operation. The cited portions of the secondary '068 reference (upon which all rejections rely) also fail to teach aspects of the claimed invention involving blocking access to a bus, as the cited portions are instead directed to selecting between busses; the Office Action's assertion of "functional equivalence" is contrary to M.P.E.P. § 2144.06. Because none of the cited references teaches these aspects of the claimed invention, no reasonable interpretation of the asserted prior art, taken alone or in combination, can provide correspondence. Accordingly, the § 103(a) rejection of claims 1-20 fails.

More specifically, the cited references fail to disclose multiple limitations including any bus driver as claimed, and the generation and use of two separate release signals (with the missing bus driver or otherwise), thus failing to contemplate the invention as a whole. Regarding the claimed bus driver, the Examiner's discussion of independent claims 1, 12 and 17 fails to provide any explanation whatsoever as to where

any “bus driver” is present in the ‘805 reference or as to how such a bus driver would function in evaluating release signals independently generated by a communications unit and a bus monitor. Despite Applicant’s traversals of record, the Examiner has failed to address this lack of correspondence and further to the operation of the claimed bus driver as relative to the evaluation of two separate release signals.

Using claim 1 as an example, the claimed invention includes limitations directed to a communications unit, a bus monitor and a bus driver, where the communications unit and bus monitor each independently generate release signals, and where the bus driver compares the release signals. Accordingly, two separate release signals are generated, and “the bus driver evaluates these two release signals and, in the event that the two release signals do not coincide, blocks the access of the network node to the communication medium.” This approach not only facilitates the suppression of errors, it facilitates the detection of errors.

In an apparent attempt to assert correspondence to functions of the claimed bus driver, the Office Action goes on to state that the secondary ‘068 reference

teaches the limitation via a redundant bus system, whereby depending on the bus enable signals’ communication is either made on the primary or redundant communications bus. . . The selection of the redundant communications bus is functionally equivalent to “blocking access of the network node to the communication medium” because the system does not utilize the primary communication.

This assertion of “functionally equivalent” terms provides no explanation as to where any bus driver exists, as to how such a bus driver would function with the ‘805 reference, or as to where release signals are independently generated, in contrast to the requirements of M.P.E.P. § 2144.06. To establish functional equivalence, M.P.E.P. § 2444.06 requires that “the equivalency must be recognized in the prior art, and cannot be based on applicant’s disclosure or the mere fact that the components at issue are functional or mechanical equivalents.” In this instance and as consistent with the above discussion, while multiple signals are generated and compared, these signals are not independently generated and are further limited in response to a single trigger signal, which is not related to an access time (and unrelated to the claimed invention). The cited bus selection involves communicating over one or another bus, where the communications are not blocked in any manner, which appears to have no bearing upon (or usefulness with) the

control of a single bus system. These assertions of functional equivalence thus amount to an assertion that selecting between primary and redundant busses is the exact same thing as blocking access to a single bus (and later permitting access to that bus). This assertion is not only unsupported in the references or in the Office Action, it is untenable because no communication is blocked. Accordingly, the rejections are also improper because the Office Action's assertions of a "functionally equivalent" redundant bus system is insufficient to establish correspondence under § 103 and the M.P.E.P.

The Office Action's attempt to assert correspondence to bus driver limitations in discussing independent claim 11 also fails because the cited watchdog, which examiner asserts is functionally equivalent of the bus driver, fails to perform the functions of the bus driver as claimed. The '805 reference states the "watchdog 20, which checks whether the bus monitor unit 5, in particular its computing unit 18, is triggered by means of cyclically recurring trigger signals, is connected directly to the computing unit." (Col. 6:46-50). The watchdog does not receive two release signals; it receives one signal from the bus monitor. It is not connected to, and therefore cannot receive a signal from, a second source. Because it does not receive two signals there is no way the watchdog can compare two signals. Accordingly, nothing in the record supports that asserted correspondence to the claimed bus driver. The § 103 rejections thus cannot stand.

Applicant further traverses the § 103 rejection of all claims because the cited references teach away from the Office Action's proposed combination. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 explains the long-standing principle that a § 103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main '805 reference - the rationale being that the prior art teaches away from such a modification. *See KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007) ("[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious."); *see also In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984) (a § 103 rejection cannot be maintained when the asserted modification undermines purpose of the main reference, and such teaching away is evidence of non-obviousness). Applicant submits that the proposed combination would render the invention inoperable because it would result in blocking or allowing bus access regardless of any timing

scheme. The secondary reference uses its comparison circuit to determine which bus to use, and not to determine whether the particular bus is conforming to a specified time access scheme. The cited portions of the secondary reference are used for decision making, not monitoring. Accordingly, modifying the '805 reference as asserted would render it inoperable for internal monitoring at a central node, in direct contrast to the purpose of the '805 reference. Under M.P.E.P. § 2143.01, the rejections cannot be maintained.

Applicant further traverses the rejections of various dependent claims as relying upon the tertiary '289 and '554 references because the references fail to teach or suggest limitations as asserted in the instant Office Action, which has also failed to address Applicant's traversals regarding these references and the lack of disclosure, contrary to the requirements of M.P.E.P. § 707.07(f). Although the secondary ('068) reference has been added, the references cited in alleging correspondence to various limitations in the dependent claims remain the same. Applicant thus further maintains and fully incorporates the (uncontested) traversals of the §103 rejections of the dependent claims. For example, the cited "element" (445 and 446 in the '289 reference) does not appear to show any inverse coding as in claim 3, as each "element" appears respectively to refer to a node at which an output 451 of a flip-flop 450 and a clock signal are provided (*see, e.g.*, Col. 22:3-45). Generally, the rejection is vague and unclear as to what is being asserted as teaching or suggesting inversely-coded signals and, specifically, inversely-coded trigger signals as modified by the '805 reference, and the instant Office Action has failed to further clarify (or even mention) these rejections. Regarding claims 4 and 5, the Office Action's citation to a low-pass filter for improving the fidelity of a protection time slot logic does not disclose limitations directed to an evaluation of release signals under the influence of a low-pass filter. Regarding claims 6 and 7, the Office Action's citation to an interface to a communications computer does not disclose claim limitations directed to error-state detection that is "resettable from the outside" (claim 6) or "signaled to the outside" (claim 7). These are examples of claims bearing limitations to which no correspondence has been provided on the record, and the rejections of other claims similarly fail. As such, the rejections of these claims cannot be maintained.

Regarding the Office Action's objection to the abstract, Applicant believes that the instant application as filed was appropriate under the requirements for a U.S. national application claiming priority to an application filed under the PCT. Notwithstanding this, Applicant has attached a copy of the abstract on a separate piece of paper, and believes that objection should be withdrawn. This action should not be considered an amendment to the specification.

Applicant has amended claims 9, 13 and 18 to reflect that the communications with the network nodes consist of communications over a single communications link. While Applicant believes that this amendment is unnecessary to overcome rejections as presented in the instant Office Action, in consideration of the above discussion and otherwise, Applicant further submits that the proposed combination of references fails to disclose blocking access to a single communication link as claimed, as the secondary '068 reference requires that two links be present. Support for these limitations may be found throughout the specification, with exemplary embodiments shown in FIG. 2 and described at columns 0018-0023 of the published version of the Application.

In view of the remarks above and the traversals of record as incorporated herein (and unaddressed in the instant Office Action), Applicant believes that each of the rejections/objections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Juergen Krause-Polstorff, of NXP Corporation at (408) 474-9062.

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